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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/705,992

11/12/2003

Lee D. Saathoff

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EXAMINER

BELLAMY, TAMIKO D

ART UNIT

PAPER NUMBER

2856

MAIL DATE

DELIVERY MODE

07/26/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/705,992

Applicant(s)

SAATHOFF ET AL.

Examiner

Tamiko D. Bellamy

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) 1-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 35-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomizawa et al. (5,880,073).

Re claim 35, transmission fluid is defined as a **special kind of oil**. As depicted in fig. 1, Tomizawa et al. discloses a method to measure coefficient of friction of **oil** (i.e. power transmission fluid) using a LFW-1 test apparatus, including: applying oil between a block (2) and ring (1) of an LF1-1 test apparatus; rotating the ring relative to the block from a velocity of 0 (i.e. either the rotational axis of the rotating body, or any part of the body 1 that is stopped before rotating) to 270 rpm, and then stopping the ring after testing; and determining the coefficient of friction by use of distortion meter (3) (Col. 8, lines 1-24). Tomizawa does not state whether the acceleration (i.e. 0-270 rpm) and deceleration (i.e. 270 rpm to 0) are constant; and does not state that any point of the ring changes in velocity from 0 to .5 m/s in about 40 seconds. It would have been obvious to accelerate and deceleration the ring at constant values as motors that rotate test rotors routinely accelerate and decelerate in an approximately constant rate. In addition, it would have been obvious to employ a motor size and rotating ring diameter that would changes the velocity of the ring from 0 to about .5 m/s

in about 40 seconds because one of ordinary skill would be inclined to use any diameter ring and any size motor that results in the required 270 rpm taught in Tomizawa. **The velocity of “0 to about .5 m/s in about 40 seconds” limitation would result for any roller that employs an appropriate size motor.**

**(Note: If there are any unexpected benefits that result from the constant acceleration/deceleration and “0 to about 0.5 m/s in about 40 seconds” limitations”, Applicant is encouraged to point that out in any subsequently filed remarks. To date, it simply appears that the claims are directed to a method of using a known device with parameters that are generally known to one of ordinary skill. In addition, please note that claiming optimum ranges by themselves may not necessarily result in patentable subject matter. In this regard, unexpected results are critical.)** Therefore, to employ Tomizawa et al. on a rotating a ring relative to a the block from a velocity of about 0 m/s to about 0.5 m/s at a constant acceleration and rotating a ring relative to the block from a velocity of about 0.5 m/s to 0 m/s at a constant deceleration would have been obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches the use of testing the friction of an oil using a LFW tester using a known velocity.

Re claim 36, Tomizawa et al. discloses measuring the coefficient of friction of oil during a 10 minute test (Col. 8, lines 10-15). While Tomizawa et al. does not specifically disclose measuring friction to provide about 50 or more measurements, the method Tomizawa et al. can easily be repeated until 50 measurements are obtained using minor skill in the art. Therefore, to employ Tomizawa et al. on 50 or more measurement would have been obvious

to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches determining a friction measurement of test oil.

Re claim 37, Tomizawa et al. discloses measuring the coefficient of friction of oil during a 10 minute test (Col. 8, lines 10-15). While Tomizawa et al. does not specifically disclose measuring friction to provide about 100 or more measurements, the method Tomizawa et al. can easily be repeated until 100 measurements are obtained using minor skill in the art. Therefore, to employ Tomizawa et al. on 100 or more measurement would have been obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches determining a friction measurement of test oil.

Re claim 38, Tomizawa et al. discloses measuring the coefficient of friction of oil during a 10 minute test (Col. 8, lines 10-15). While Tomizawa et al. does not specifically disclose measuring friction to provide about 2800 or more measurements, the method Tomizawa et al. can easily be repeated until 2800 measurements are obtained using minor skill in the art. Therefore, to employ Tomizawa et al. on 2800 or more measurement would have been obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches determining a friction measurement of test oil.

Re claim 39, Tomizawa et al. discloses measuring the coefficient of friction of oil during a 10 minute test (Col. 8, lines 10-15). While Tomizawa et al. does not specifically disclose repeating a cycle form about 1 to 50 times, the method Tomizawa et al. can easily be repeated until about 50 measurements are obtained using minor skill in the art. Therefore, to employ Tomizawa et al. on 1 to about 50 measurements would have been obvious to one of

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ordinary skill in the art at the time of the invention since this reference explicitly teaches determining a friction measurement of test oil.

Re claims 40 and 41, Tomizawa et al. discloses using **an oil to be tested**, which can be an aged or new type of oil which does not change any scope of the device of Tomizawa et al. (Col. 8, lines 10-24).

Re claim 42, Tomizawa et al. discloses using **an oil to be tested**, which can be an aged or new type of oil which does not change any scope of the device of Tomizawa et al. (Col. 8, lines 10-24). Tomizawa et al. lacks the measuring the friction of a first power transmission fluid that is new, aging the first transmission fluid, and measuring the friction of the aged first transmission fluid. However, the method of Tomizawa et al. can easily be repeated until pluralities of measurements are obtained using minor skill in the art. Furthermore, the method of repeatedly testing oil, the tested oil inherently becomes aged during the process. Therefore, to employ Tomizawa et al. on measuring the friction of a first fluid that is new, and measuring the friction of first oil after the fluid has aged would have been the obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches determining a friction measurement of test oil.

Re claim 43, Tomizawa et al. discloses using **an oil to be tested**, which can be an aged or new type of oil which does not change any scope of the device of Tomizawa et al. (Col. 8, lines 10-24). Tomizawa et al. lacks the measuring the friction of a first power transmission fluid that is new, aging the first transmission fluid, and measuring the friction of the aged first transmission fluid. However, the method of Tomizawa et al. can easily be repeated until pluralities of measurements are obtained using minor skill in the art. Furthermore, the

method of repeatedly testing oil, the tested oil inherently becomes aged during the process.

Comparing the plurality of measurements requires minor skill in the art. Therefore, to employ Tomizawa et al. on comparing the measured friction of an aged first fluid to the new first fluid would have been the obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches determining a friction measurement of test oil.

Re claim 44, Tomizawa et al. discloses using **an oil to be tested**, which can be a second fluid, which does not change any scope of the device of Tomizawa et al. (Col. 8, lines 10-24).

Re claim 45, Tomizawa et al. discloses using **an oil to be tested**. Tomizawa et al. lacks the detail of comparing the friction measurement of a first transmission fluid with a second transmission fluid. However, the method of Tomizawa et al. can easily be repeated until pluralities of measurements are obtained using minor skill in the art. The method of Tomizawa et al. can easily be repeatedly using the same oil or a different oil, without changing the scope of the invention. Comparing the plurality of measurements requires minor skill in the art. Therefore, to employ Tomizawa et al. on comparing the measured friction of a first fluid to a second fluid would have been the obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches determining a friction measurement of test oil.

Re claim 46, Tomizawa et al. discloses using **an oil to be tested**. Tomizawa et al. discloses a device for testing oils used in an automatic transmission (Col. 1, lines 9-10).

Re claim 47, Tomizawa et al. discloses using **an oil to be tested**, which can be an aged or new type of oil which does not change any scope of the device of Tomizawa et al. (Col. 8,

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lines 10-24). Tomizawa et al. lacks the measuring the friction of a first power transmission fluid that is new, aging the first transmission fluid, and measuring the friction of the aged first transmission fluid. However, the method of Tomizawa et al. can easily be repeated until pluralities of measurements are obtained using minor skill in the art. Furthermore, the method of repeatedly testing an oil, the tested oil inherently becomes aged during the process. Comparing the plurality of measurements requires minor skill in the art. Therefore, to employ Tomizawa et al. on comparing the measured friction of an aged first fluid to the new first fluid would have been the obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches determining a friction measurement of test oil.

Re claim 48, Tomizawa et al. discloses using **an oil to be tested**. Tomizawa et al. lacks the detail of comparing the friction measurement of a first transmission fluid with a second transmission fluid. However, the method of Tomizawa et al. can easily be repeated until pluralities of measurements are obtained using minor skill in the art. The method of Tomizawa et al can easily be repeatedly using the same oil or a different oil, without changing the scope of the invention. Comparing the plurality of measurements requires minor skill in the art. Therefore, to employ Tomizawa et al. on comparing the measured friction of a first fluid to a second fluid would have been the obvious to one of ordinary skill in the art at the time of the invention since this reference explicitly teaches determining a friction measurement of test oil.



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Re claims 49 and 50, Tomizawa et al. discloses using **an oil to be tested**, which inherently includes an oil comprising alkoxylated alcohol or a power transmission fluid free of alkoxylated alcohol.

Re claim 51, Tomizawa et al. discloses the particular power transmitting application comprises an automatic transmission (Col. 1, lines 9-10).

***Response to Arguments***

3. Applicant's arguments filed 5/25/07 have been fully considered but they are not persuasive.
4. Re claims 35-51, the applicant argues that Tomizawa discloses turning on the LFW-1 test apparatus, rotating the ring relative to a block for ten minutes at 270 rpm, and then turning off the LFW-test apparatus. The applicant argues that nothing in Tomzawa discloses measuring friction **during a cycle**. Tomizawa et al. discloses a method to measure coefficient of friction of **oil** (i.e. power transmission fluid) using a LFW-1 test apparatus, including: applying oil between a block (2) and ring (1) of an LF1-1 test apparatus; rotating the ring relative to the block from a velocity of 0 (i.e. either the rotational axis of the rotating body, or any part of the body 1 that is stopped before rotating) to 270 rpm, and then stopping the ring after testing; and determining the coefficient of friction by use of distortion meter (3) (Col. 8, lines 1-24). **(Note: If there are any unexpected benefits that result from the constant acceleration/deceleration and "0 to about 0.5 m/s in about 40 seconds" limitations", Applicant is encouraged to point that out in any subsequently filed remarks. To date, it simply appears that the claims are directed to a method of using a known device with parameters that are generally known to one of ordinary skill. In addition, please note that claiming optimum ranges by themselves may**

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**not necessarily result in patentable subject matter. In this regard, unexpected results are critical.)**

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamiko D. Bellamy whose telephone number is (571) 272-2190. The examiner can normally be reached on Monday - Friday 7:30 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

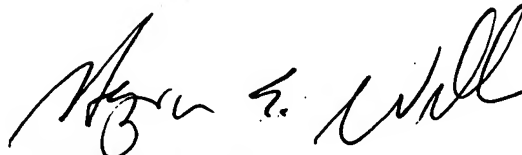
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tamiko Bellamy

T.B.

July 13, 2007



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